

Docket No. F-8958

Ser. No. 10/573,214

**REMARKS**

Claims 1 and 3-20 remain pending in this application. Claims 1 and 3-20 are rejected. Claim 2 is previously cancelled. No new claims are added. Claim 1 is amended herein to clarify the invention.

Applicants respectfully submit that, upon entry of the subject amendment, the application will be in condition for allowance. Applicants, thus, respectfully request consideration of the above amendment and the following remarks.

**Subject Matter of the Claimed Invention**

The claimed inventions are directed to an absorbent article having a front sheet, a back sheet, and an absorbent body. The absorbent body has a standard-height portion and a thicker, middle-height portion. For example, the middle-height may be achieved by adding one or more laminated layers. The middle-height portion has a constant thickness over a part of the middle-height portion and one or more lesser thicknesses at one or more opposing middle-height portion side edge steps.

An object of the invention is to provide an absorbent article such as a female sanitary napkin which can sufficiently block body fluid even when a lot of body fluid is discharged at once. Of significance is that leakage is prevented both in a front-rear direction and in a sideways, widthwise direction. To do so, leakage

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preventing grooves are included which extend to a longitudinal direction of the absorbent article. First and second grooves are provided at left and right sides, respectively, creating a center area of the middle-height portion that holds the discharged body fluid.

Each of the first and second grooves includes a first end portion, a second end portion and a third portion between the first end portion and second end portion. The third portion extends longitudinally and curves outward along the longitudinal length. The groove third portions are spaced farthest apart toward the end portions, and are spaced gradually closer together away from the end portions. The first end portion and the second end portion for each one of the first and second grooves curve inward extending in a lateral direction.

#### Section 103 Rejections

Claims 1 and 3-20 are rejected under 35 USC §103(a) as being unpatentable over Shimoe et al. (U.S. Patent No. 6,867,345) in view of Goto et al. (JP 2003230593).

Shimoe et al. disclose a sanitary napkin having a topsheet, a backsheet and a liquid absorbent core. The core has a varying thickness in a width-wise direction formed by having decreasing density of fiber away from the center (see abstract). A pair of grooves extend lengthwise. It is noted that the grooves do not include

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curved end portions extending laterally. It also is noted that Shimoe et al. do not disclose a middle-height portion of an absorbent body that is laminated as a layer over a standard-height portion.

Goto et al. disclose a sanitary napkin having two sheet layers 3, 7 over an absorbable core 4. It is noted that such layers 3, 7 are not fill material layers, and thus are not laminated layers of an absorbent body.

#### The Claims Distinguished

**Claim 1** distinguishes over the cited art based at least upon the following claim limitations:

- said absorbent body having a standard-height portion and a middle-height portion **laminated as a layer** over said standard height portion in a thickness direction of said absorbent body;
- each one of said first and second leakage preventing grooves having a first end portion, a second end portion and a third portion between the first end portion and second end portion, the respective third portion of said each one leakage preventing groove extending longitudinally and curving outward ... **the first end portion and the second end portion of each one of the first and second**

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**leakage preventing grooves curving inward and extending in the lateral direction.**

It is respectfully submitted that the cited art does not teach an absorbent article having an absorbent body formed of at least two laminated layers of absorbent material. An advantage of the laminated layers is that the varied thickness may be achieved in a simple manufacturing process where laminated layers of absorbent material are applied on top of each other. Thus, one given layer need not be processed to having varying density at different locations within such layer.

It also is respectfully submitted that the cited art does not teach a pair of leakage preventing grooves, each having respective end portions that curve inward to extend in a lateral direction. By providing end portions which curve inwards, body fluid flowing along a groove is guided inwards at the groove ends. Thus, overflowing fluid at the groove ends is guided to the thicker middle-height portion and away from the outer, thinner standard-height portion.

**Claims 3-20** depend from claim 1 and distinguish over the cited art based at least upon the same reasons as discussed for claim 1.

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No fee is believed due. If there is any fee due the USPTO is hereby authorized to charge such fee to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,

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